

Fig. 1a

FIG. 1b is a schematic diagram of a system for monitoring a person's head position. The system includes a person 117, a head-mounted display 115, and a camera 121. The head-mounted display 115 is connected to the camera 121 via a cable 123. The camera 121 is connected to a computer 125 via a cable 125. The computer 125 is connected to a network 127 via a cable 127. The network 127 is connected to a server 129 via a cable 129. The server 129 is connected to a database 131 via a cable 131. The database 131 is connected to a user interface 133 via a cable 133. The user interface 133 is connected to a user 135 via a cable 135.

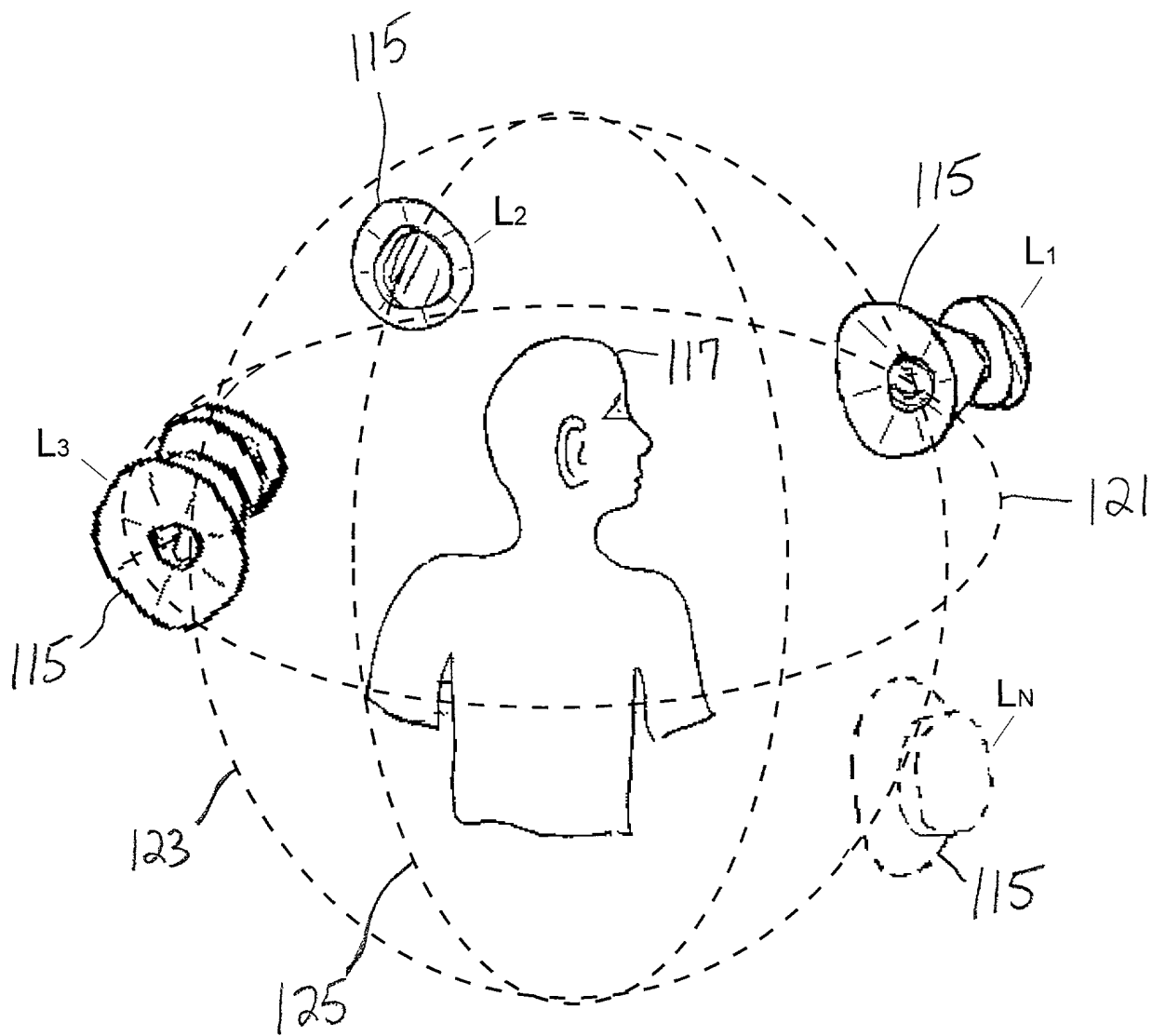


Fig. 1b

Fig. 1c

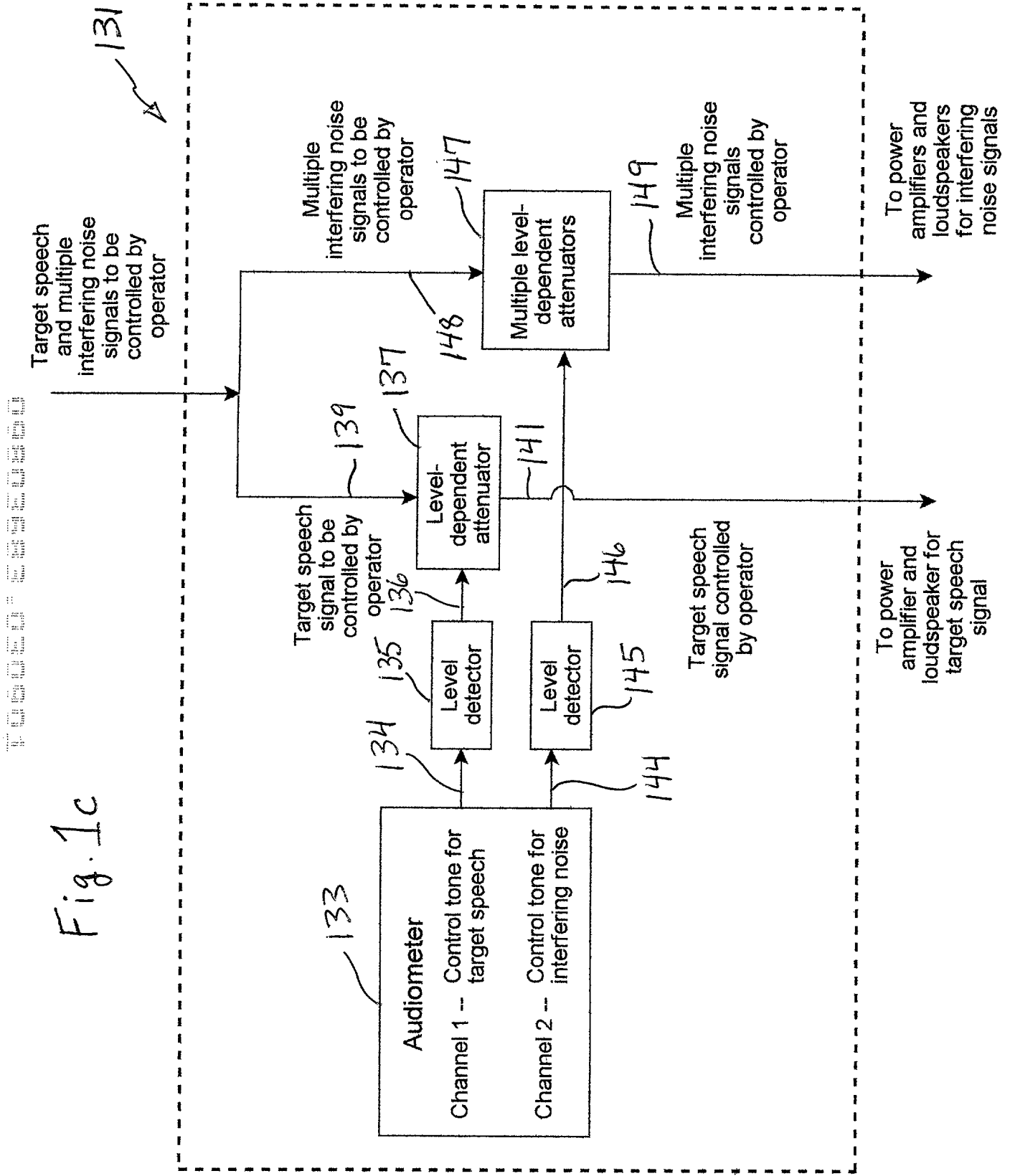
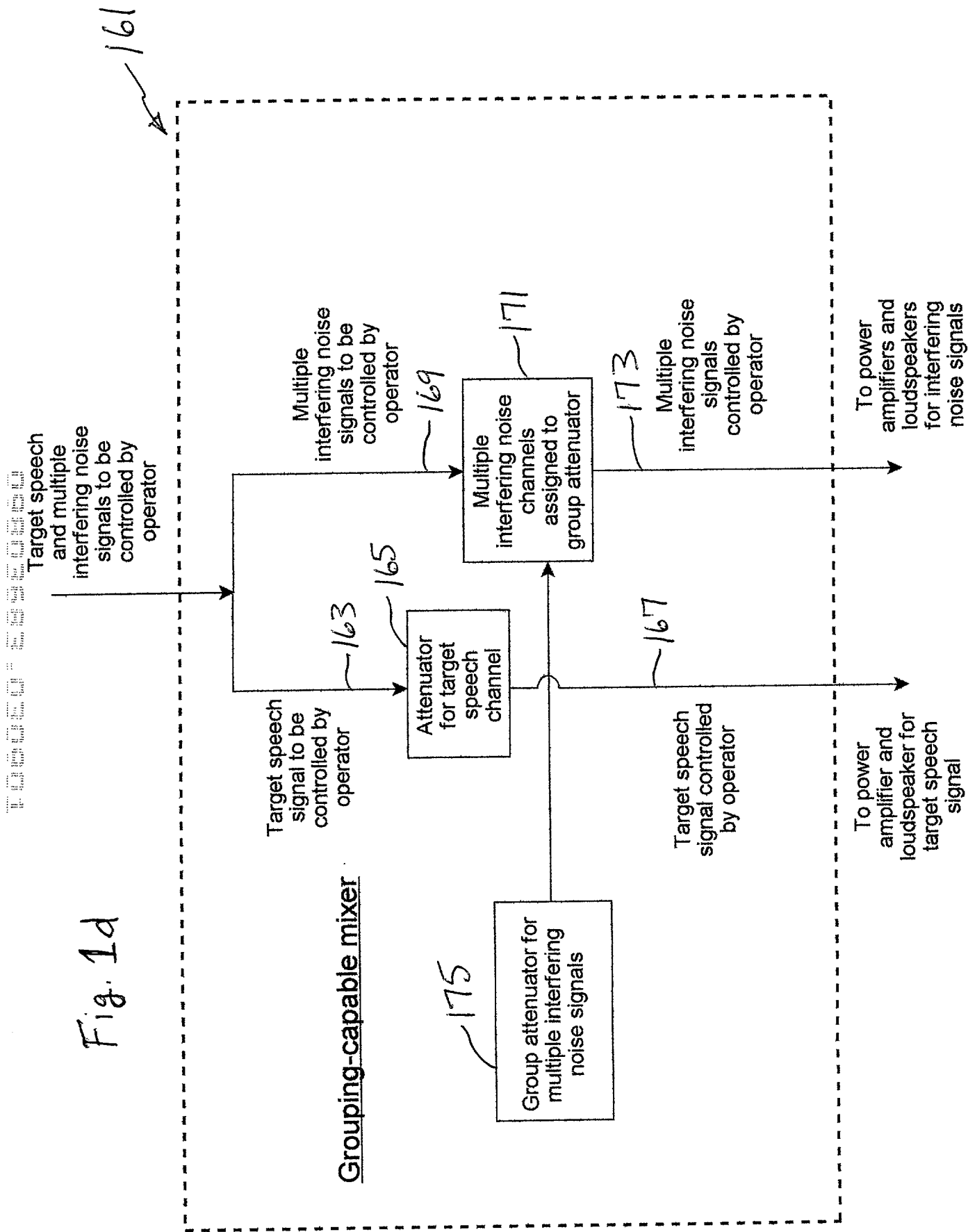


Fig. 1d



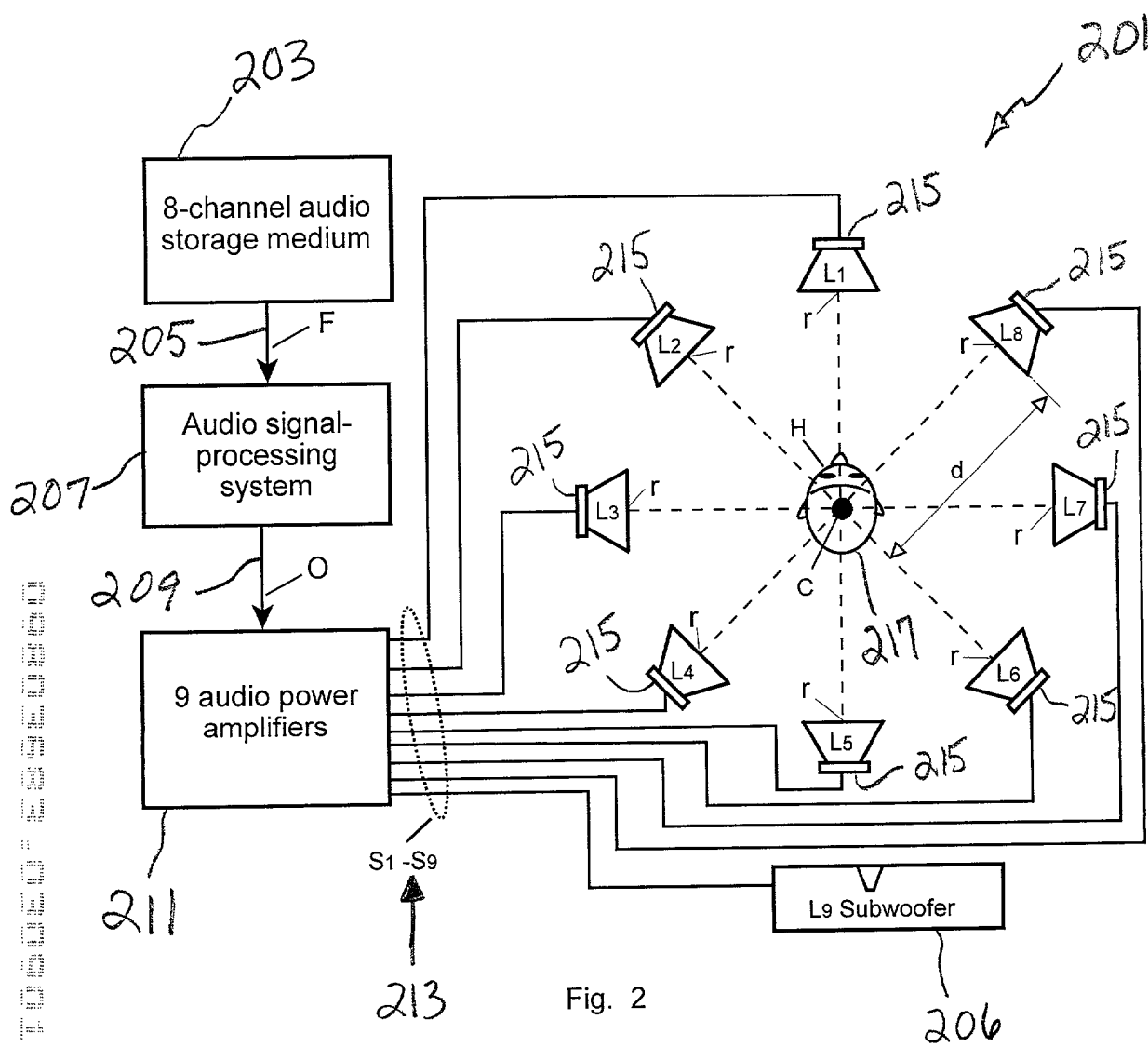


Fig. 2

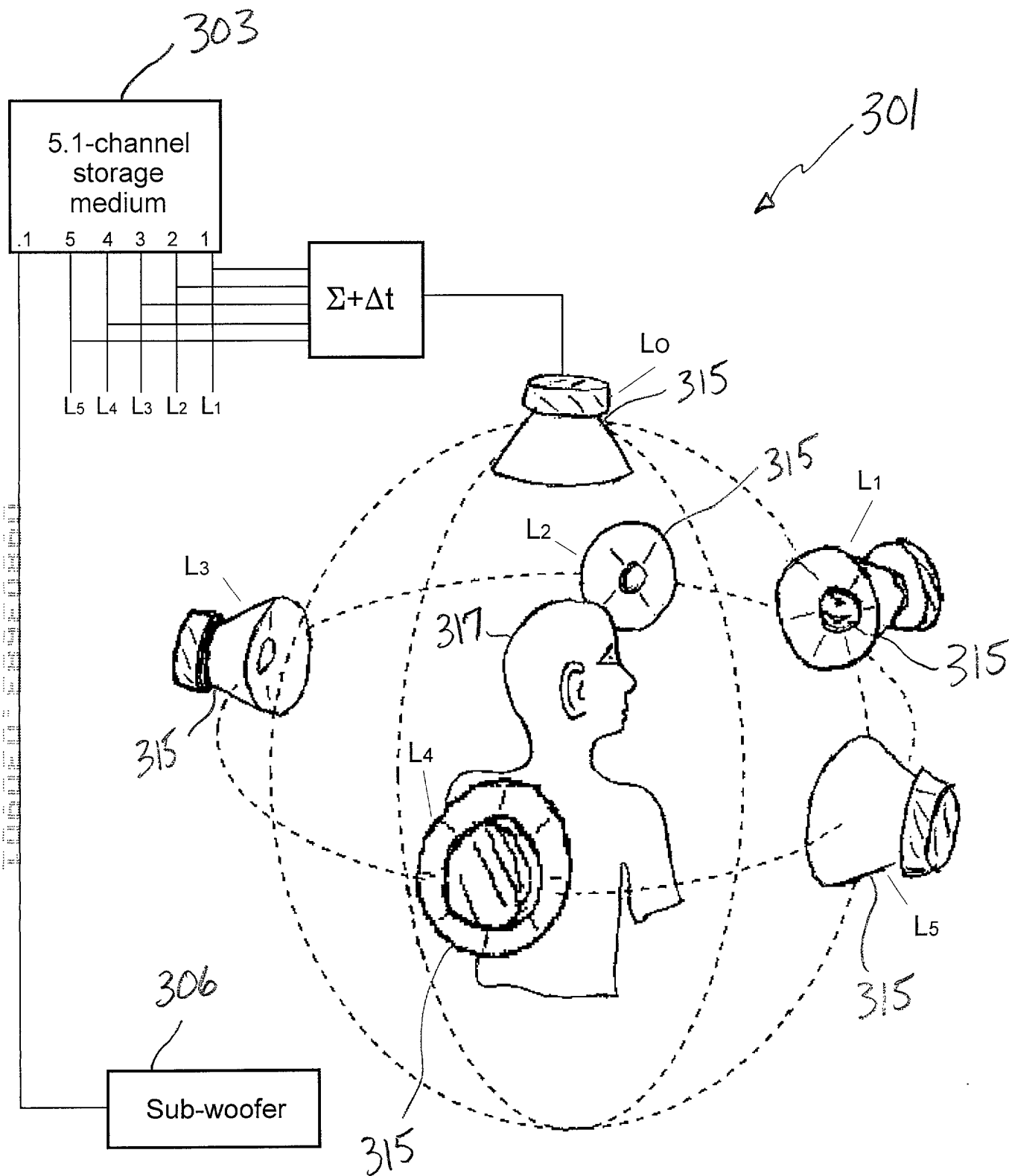


Fig. 3

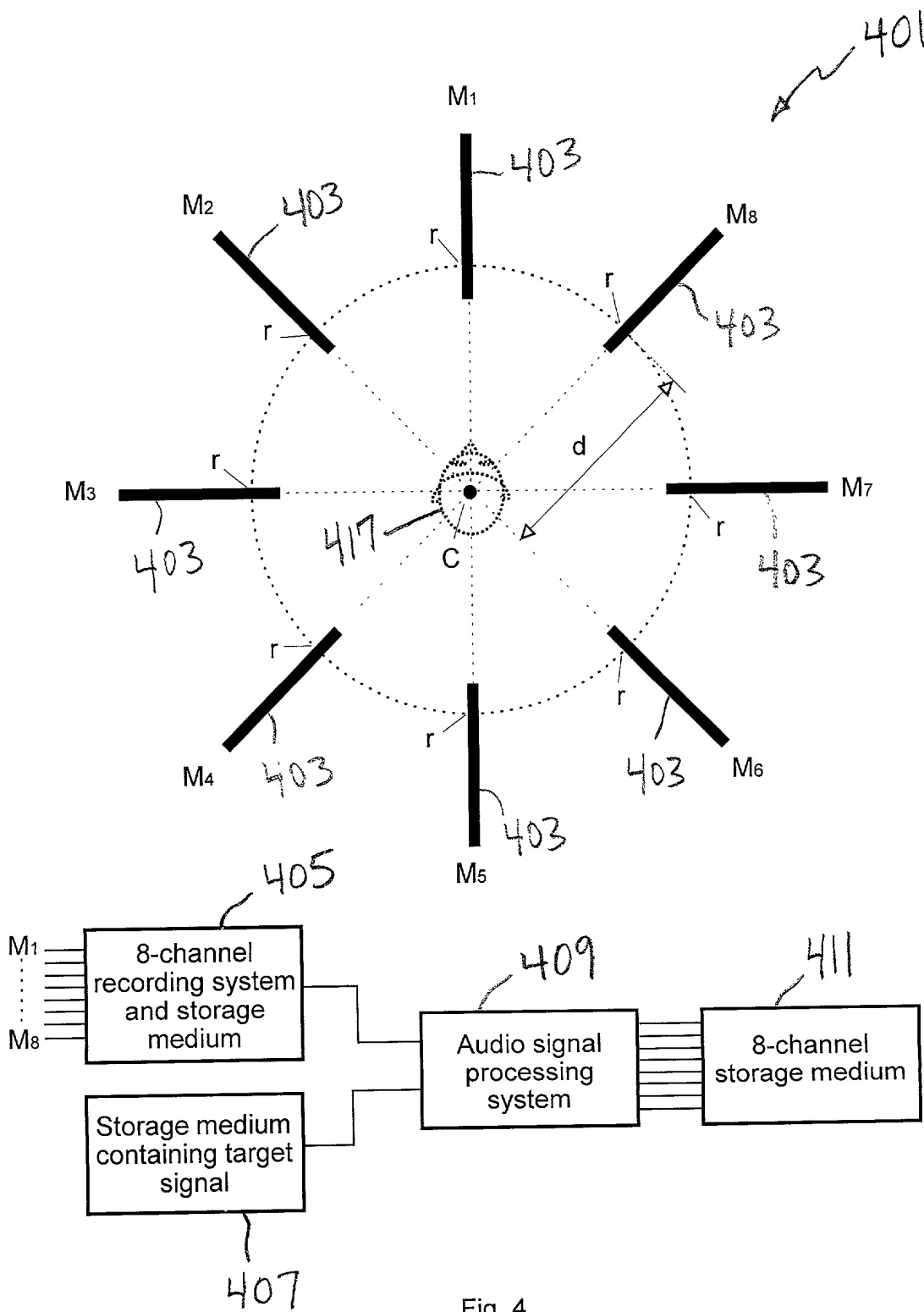


Fig. 4

FIG. 5a is a block diagram of a system for processing B-format audio signals. The system includes a pickup microphone 503, a 4-channel audio signal recording-storage-playback system 505, a B-format decoder and processor with time delay 507, a storage medium containing target signal 511, and a multi-channel audio signal processing and storage system 509. The pickup microphone 503 is oriented with its main axis (Z) pointing up, and its side axes (X and Y) pointing front and left, respectively. The 4-channel audio signal recording-storage-playback system 505 receives B-format outputs (W, X, Y, Z) from the pickup microphone 503. The B-format decoder and processor with time delay 507 receives the B-format outputs (W, X, Y, Z) from the 4-channel audio signal recording-storage-playback system 505. The storage medium containing target signal 511 provides an Omni (W) signal to the B-format decoder and processor with time delay 507. The multi-channel audio signal processing and storage system 509 receives the B-format outputs (W, X, Y, Z) from the B-format decoder and processor with time delay 507. The multi-channel audio signal processing and storage system 509 outputs multiple audio signals to a soundfield simulation apparatus. A listener is shown for orientation of the pickup microphone 503.

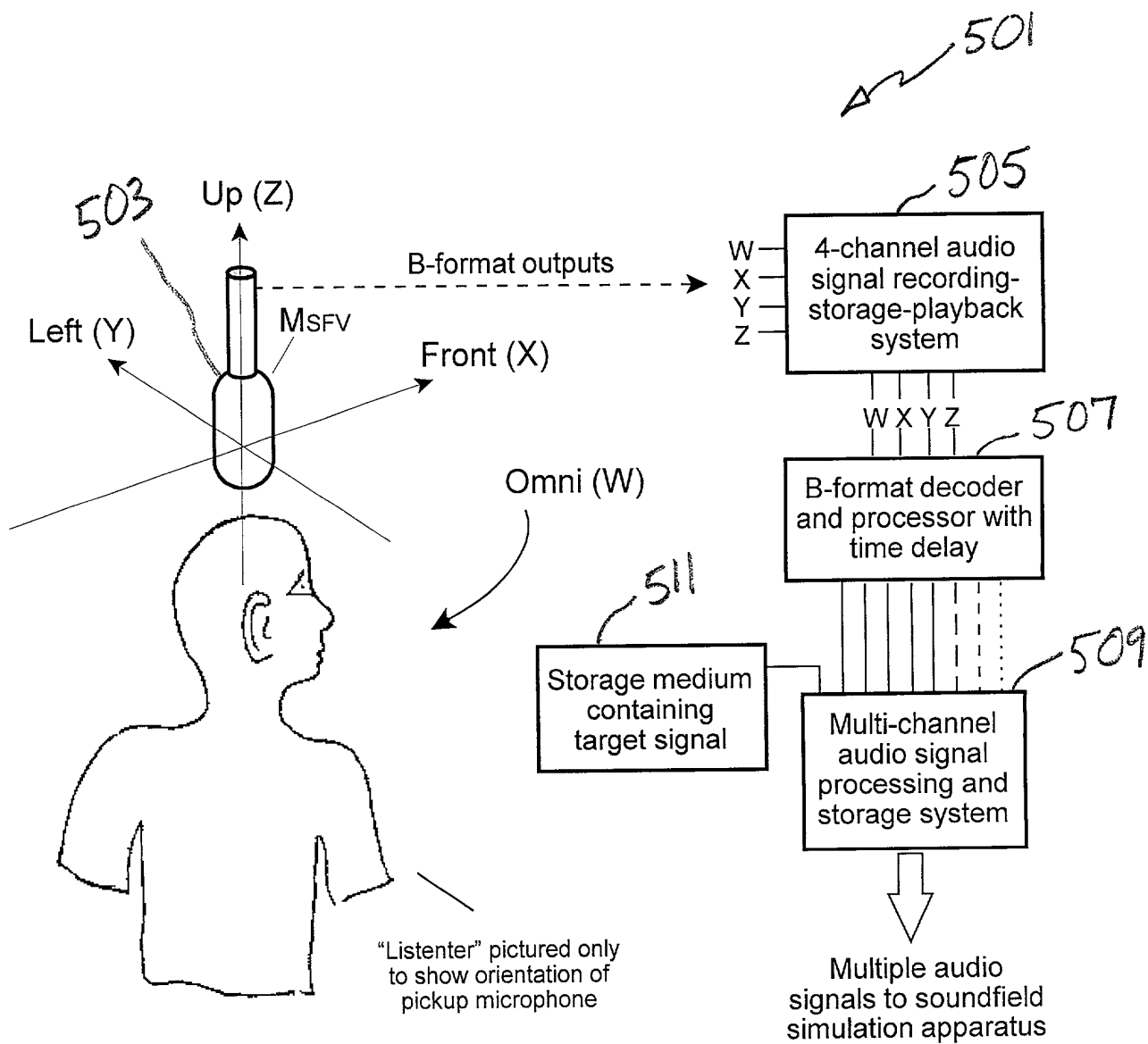


Fig. 5a





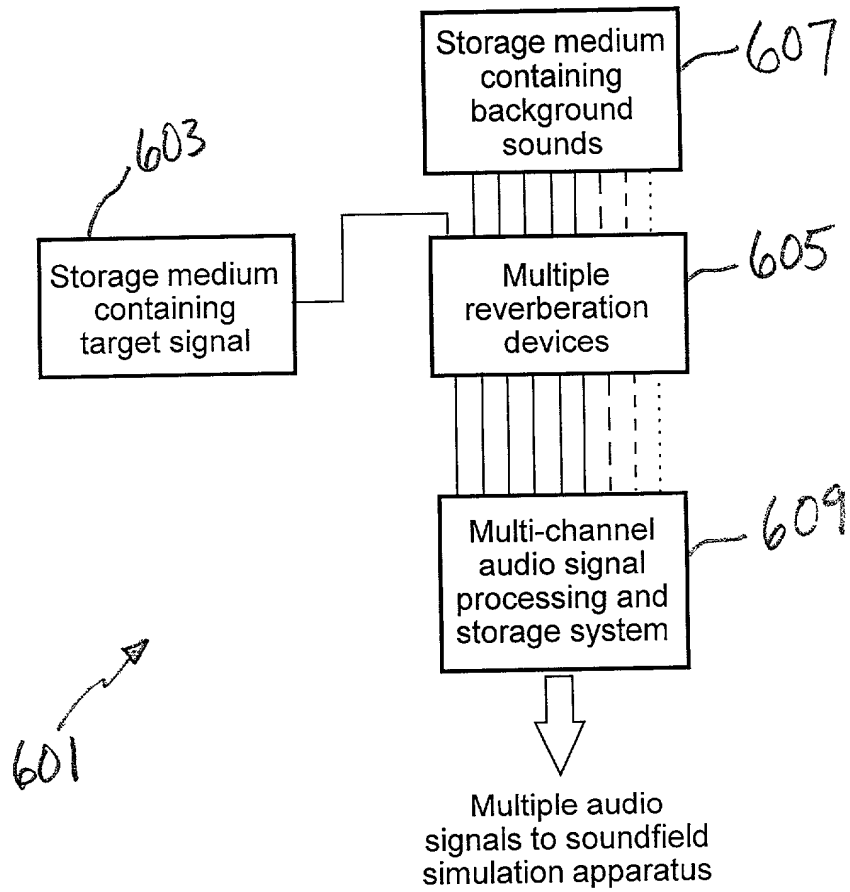


Fig. 6

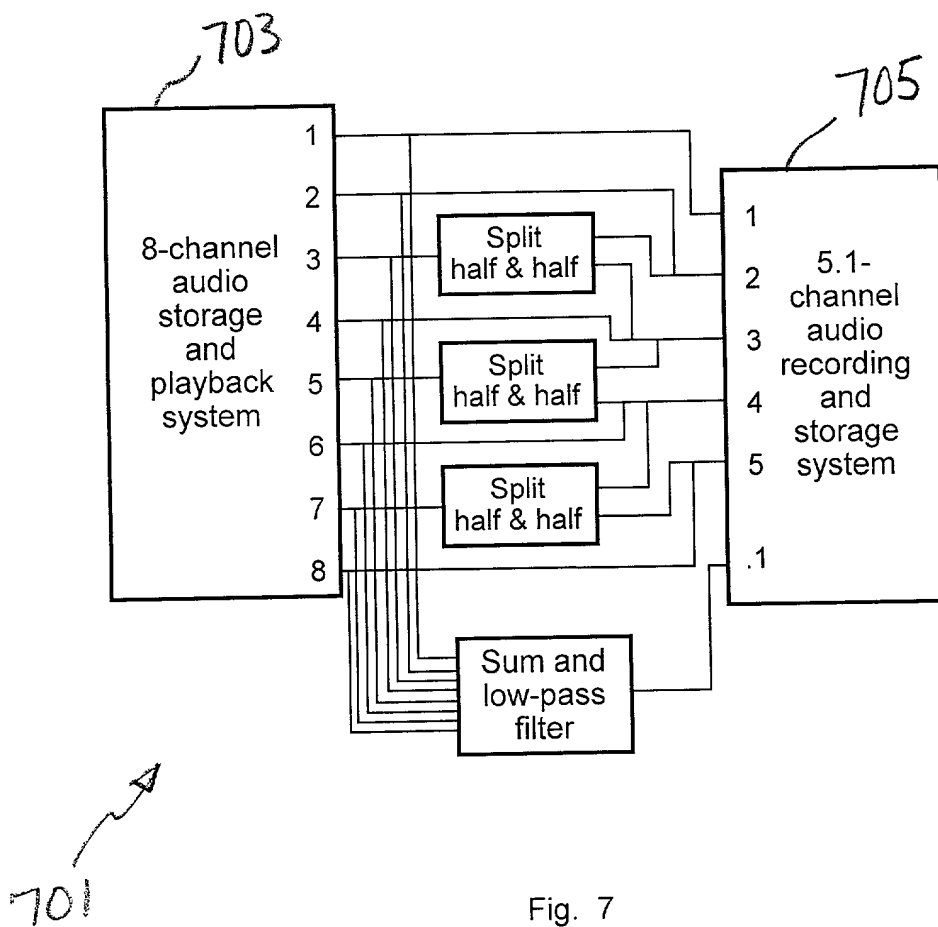


Fig. 7

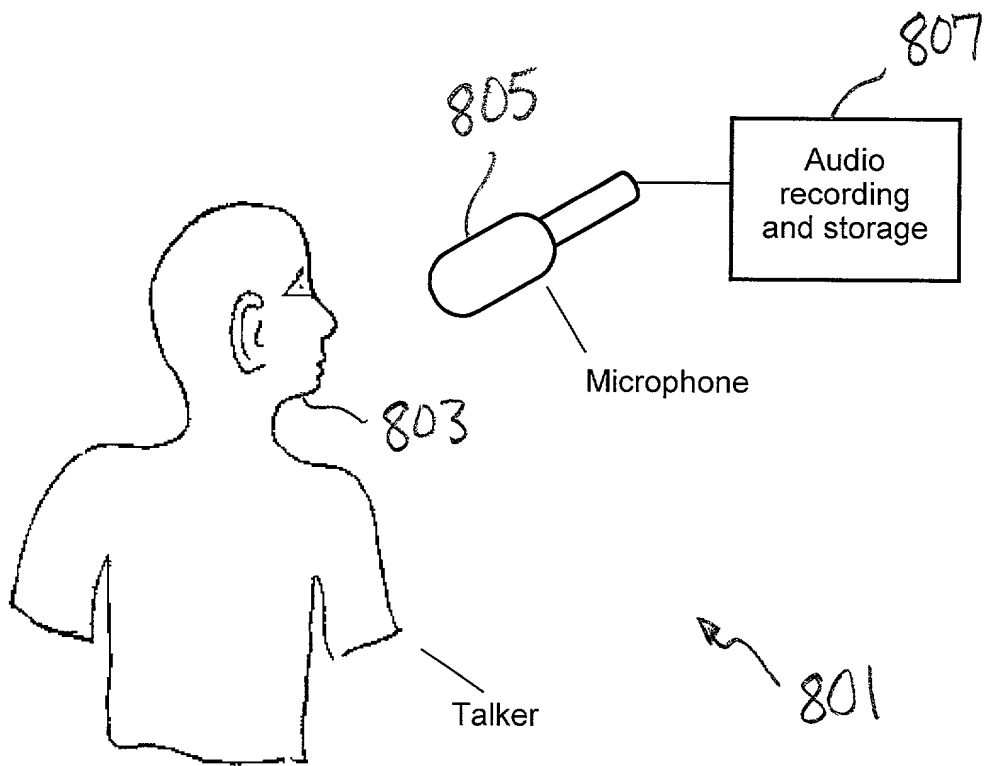


Fig. 8

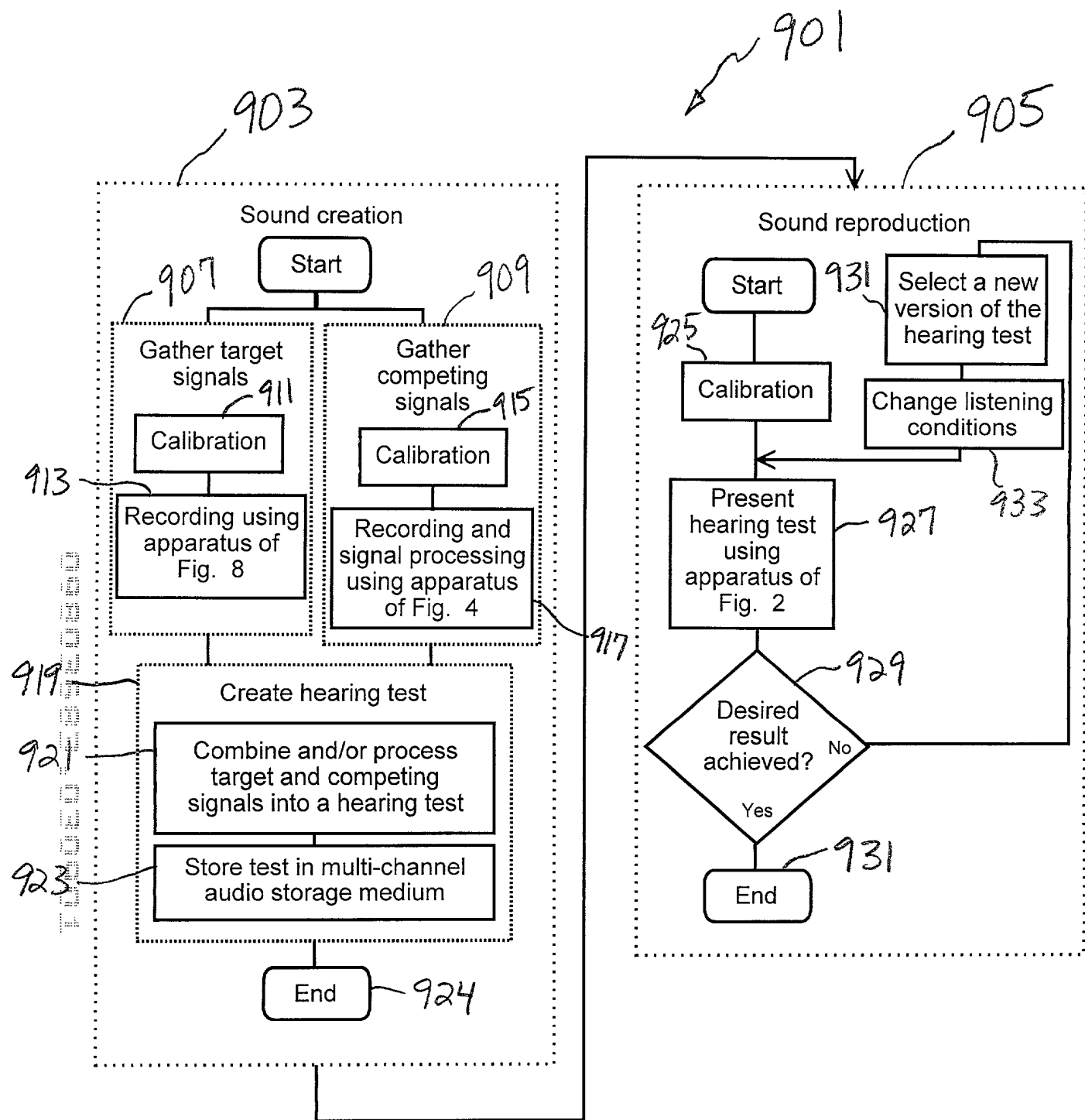


Fig. 9